## SALMON SPORT FISHING SPECIAL ALERT FOR CALIFORNIA IN-RIVER FISHERY

The California coast coho (silver) salmon population has been designated as a threatened species under the federal Endangered Species Act (ESA) found at 16 United States Code, Section 1531, et seq. It is now unlawful to fish for, capture, keep, or possess under any circumstances California coast coho salmon. Violation of the ESA may result in civil or criminal penalties.

The National Marine Fisheries Service has listed coho salmon (Oncorhynchus kisutch) in California as a threatened species under the



federal ESA. Coho salmon in coastal watersheds (waters that ultimately flow into the Pacific Ocean) from the Oregon border to and including the San Lorenzo River, Santa Cruz County are now protected under the ESA.

It is unlawful under Federal law to take (includes but is not limited to fishing for, capturing, keeping or possessing) coho salmon from the waters of California without an appropriate permit or regulation under the ESA. To minimize impacts to coho salmon that are unintentionally hooked, every effort should be made to release all hooked coho with the least amount of handling and harm possible.

Coho (silver) salmon, above left, have white gums around the teeth, while the inside of a Chinook (king) salmon's mouth is all dark. Drawing by Paul B. Johnson.

#### PUBLIC HEALTH ADVISORIES ON FISH CONSUMPTION

Fish are nutritious and good for you to eat. But some fish you catch may take in toxic chemicals from the water they live in and the food they eat. Some of these chemicals build up in the fish—and in you--over time. Although the chemical levels are usually low, it is a good idea to follow a few precautions in consuming fish, particularly if you eat fish often. The purpose of this brochure is to guide you to eat the fish you catch in ways that reduce your exposure to chemicals.

The Office of Environmental Health Hazard Assessment (OEHHA) provides specific consumption advice in this booklet for fish taken in areas where high levels of chemicals have been found in fish. However, because contamination levels are unknown for many locations, OEHHA also provides general advice on how to reduce your exposure to chemicals in noncommercial fish, referred to as sport fish, that you, your family, or friends catch.

These advisories are not intended to discourage you from eating fish entirely. Fish are nutritious and an excellent source of protein. The advisories should be followed to make your sport fish eating safer.

OEHHA can provide more information on the advisories and the health effects of chemical contaminants in the fish. OEHHA also has an illustrated brochure

giving general advice. The brochure can be requested in several different languages. To stay current for updates and to request additional information, please check the OEHHA Web site at www.oehha.ca.gov or contact the Pesticide and Environmental Toxicology Section (PETS) of OEHHA in Sacramento (P.O. Box 4010, Sacramento, CA 95812-4010, Phone 916/327-7319 or FAX 916/327-7320) or Oakland (1515 Clay Street, 16th Floor, Oakland, CA 94612, Phone 510/622-3170 or FAX 510/622-3218).

#### **General Advice**

You can reduce your exposure to chemical contaminants in sport fish by following the recommendations below. Follow as many of them as you can to increase your health protection. This general advice is not meant to take the place of advisories for specific areas, which follow later in this booklet, but should be followed in addition to them. Sport fish in most water bodies in the state have not been evaluated for their safety for human consumption. This is why we strongly recommend following the general advice given below.

## **Fishing Practices**

Chemical levels can vary from place to place. Your overall exposure to chemicals is likely to be lower if you eat fish from a variety of places rather than from one usual spot that might have high contamination levels.

Be aware that OEHHA may issue new advisories or revise existing ones. Consult the Department of Fish and Game regulations booklet or check with OEHHA on a regular basis to see if there are any changes that could affect you.

## **Consumption Guidelines**

**Fish Species**: Some fish species have higher chemical levels than others in the same location. If possible, eat smaller amounts of several different types of fish rather than a large amount of one type that may be high in contaminants.

Fish Size: Smaller fish of a species will

usually have lower chemical levels than larger fish in the same location because some of the chemicals may become more concentrated in larger, older fish. It is advisable to eat smaller fish (of legal size) more often than larger fish.

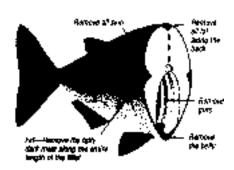
# Fish Preparation and Consumption

- Eat only the fillet portions. Do not eat the guts and liver because chemicals usually concentrate in those parts. Also, avoid frequent consumption of any reproductive parts such as eggs or roe.
- Many chemicals are stored in the fat. To reduce the levels of these chemicals, skin the fish when possible and trim any visible fat.
- Use a cooking method such as baking, broiling, grilling, or steaming that allows the juices to drain away from the fish. The juices will contain chemicals in the fat and should be thrown away. Preparing and cooking fish in this way can remove 30 to 50 percent of the chemicals stored in fat. If you make stews or chowders, use fillet parts.
- Raw fish may be infested by parasites.
   Cook fish thoroughly to destroy the parasites. This also helps to reduce the level of many chemical contaminants.

## **Advice for Pregnant Women**

Young children and fetuses are more sensitive to the toxic effects of methylmercury, the form of mercury of health concern in fish.

The U.S. Food and Drug Administration (FDA) is responsible for commercial seafood safety. FDA has issued the



following advice to pregnant women and women of childbearing age who may become pregnant about the risks of mercury in fish. The FDA advises these women not to eat shark, swordfish, king mackerel, and tilefish. The FDA also advises that it is prudent for nursing mothers and young children not to eat these fish as well.

The U.S. Environmental Protection Agency has also issued national advice to protect against consuming mercury in fish. They recommend that women who are pregnant or may become pregnant, nursing mothers, and young children eat no more than one meal per week of noncommercial freshwater fish caught by family and friends.

National advice for women and children on mercury in fish is available from the U.S. Environmental Protection Agency at www.epa.gov/ost/fish and the U.S. Food and Drug Administration at www.cfsan.fda.gov/~dms/admehg.html

### Adjusting Fish Meal Size for Body Weight

In the site-specific guidance that follows, OEHHA gives consumption advice in terms of meals for a given period such as a meal a week. Unless otherwise specified, an eight-ounce meal size is the standard amount allowed for the "average" adult. The average adult weighs approximately 150 pounds (equivalent to 70 kg). Because you and your family members may weigh more or less than the average adult, you can use the table below as a general guide to adjust serving sizes to body weight.

How	big	is	a	meal?

		Your meal size			
If you weigh		should not exceed			
lbs.	or kg	Ounces 1	or grams		
19	. 09	1 2	28		
39	. 18	2 5	57		
58	. 26	3 8	35		
77	. 35	41	13		
96	. 44	5 1	142		
116	. 53	61	170		
135	. 61	7 1	99		
154	. 70	8 2	227		
173	. 79	9 2	255		
193	. 88	10 2	284		
212	. 96	11 3	312		
231	. 105	12 3	340		
250	. 113	13 3	369		
270	. 123	14 3	397		
289	. 131	15	125		
308	. 140	16	154		

Sixteen ounces is equal to one pound

#### SITE-SPECIFIC CONSUMPTION RECOMMENDATIONS

The following guidleines apply to the specific advisories that follow

- Eating sport fish in amounts slightly greater than what is recommended should not present a health hazard if only done occasionally, such as eating fish caught during an annual vacation.
- Nursing and pregnant women and young children *may be more sensitive* to the harmful effects of some of the chemicals and should be particularly careful about following the advisories. Because contaminants take a long time to leave the body after they accumulate, women who plan on becoming pregnant should begin following the more restrictive consumption advice a year before becoming pregnant. In this way, the levels of chemicals stored in the body can go down.
- The limits that follow for each species and area assume that no other contaminated fish is being eaten. If you consume several different listed species from the same area, or the same species from several areas, your total consumption still should not exceed the recommended amount. One simple

approach is to just use the lowest recommended amount as a guideline to consumption.

• Just because the area where you like to fish is not included in the specific advisory areas that follow, it does not necessarily mean that it is free from chemical contamination. Sport fish in most parts of the state have not yet been evaluated for their safety for human consumption. Follow the general advice given earlier to protect your health.

The specific advisories listed below are arranged generally from north to south:

## Lake Pillsbury (Lake County)

Because of elevated levels of mercury, women who are pregnant or may become pregnant within a year, nursing mothers, and children under age six should not eat fish from Lake Pillsbury. Other adults and children age six and older may eat fish from Lake Pillsbury on an occasional, but not regular, basis.

# Clear Lake (Lake County) and Lake Berryessa (Napa County)

Because of elevated mercury levels, adults should eat no more than the amounts indicated below per month. Women who are pregnant or may become pregnant, nursing mothers, and children under age six should not eat fish from these lakes. Children 6-15 years of age should eat no more than one-half the amounts indicated for adults.

	Lake	Berryessa
largemouth bass over 15"	1 lb	1lb
largemouth bass under 15" .	2 lbs	2lbs
$small mouthbassallsizes\dots$	*	1lb
white catfish all sizes	3 lbs.	2lbs
Channel catfish over 24 "	1 lb	3lbs
Channel catfish under 24"	3 lbs.	3lbs
rainbow trout all sizes	*	10lbs
brown bullhead all sizes	6 lbs.	*
Sacramento blackfish		
all sizes	6 lbs.	*
crappie over 12"	1 lb	*

Clear Lake

Fish species

crappie under 12" ...... 3 lbs. .. \*

hitch all sizes ...... 10 lbs. \*

# San Francisco Bay and Delta Region

- Because of elevated levels of mercury, PCBs, and other chemicals, the following interim advisory has been issued. A final advisory will be issued when the data have been completely evaluated.
- Adults should eat no more than two meals per month of San Francisco Bay sport fish, including sturgeon and striped bass caught in the delta. (One meal for a 150 pound adult is about eight ounces.)
- Adults should not eat any striped bass over 35 inches.
- Women who are pregnant or may become pregnant, nursing mothers, and children under age six should not eat more than one meal of fish per month. In addition, they should not eat any striped bass over 27 inches or any shark over 24 inches.
- This advisory does not apply to salmon, anchovies, herring, and smelt caught in the bay; other sport fish caught in the delta or ocean; or commercial fish.
- Richmond Harbor Channel area: In addition to the above advice, no one should eat any croakers, surfperches, bullheads, gobies or shellfish taken within the Richmond Harbor Channel area because of high levels of chemicals detected there.

<sup>\*</sup>Species not present or not tested

## Lake Herman (Solano County)

Because of elevated mercury levels, women who are pregnant or may become pregnant, nursing mothers, and children under age six should not eat fish from Lake Herman. Adults should eat no more than one pound per month of largemouth bass, and children 6-15 years of age should eat no more than eight ounces per month of largemouth bass.

Grassland Area (Merced County) Because of elevated selenium levels, no one should eat more than four ounces of fish from the Grassland area in any twoweek period. Women who are pregnant or may become pregnant, nursing mothers, and children age 15 and under should not eat any fish from this area. Guadalupe, Calero, and Almaden Reservoirs. Guadalupe Guadalupe Creek, Alamitos Creek, and the associated percolation ponds along the river and creeks (Santa Clara County) Because of elevated mercury levels in fish, no one should consume any fish taken from these locations.

# Lake Nacimiento (San Luis Obispo County)

Because of elevated mercury levels, no one should eat more than four meals per month of largemouth bass from Lake Nacimiento. Women who are pregnant or may become pregnant, nursing mothers, and children under age six should not eat largemouth bass from the area.

Harbor Park Lake (Los Angeles County) Because of elevated chlordane and DDT levels, no one should eat goldfish or carp from Harbor Park Lake.

# Salton Sea (Imperial and Riverside Counties)

Because of elevated selenium levels, no one should eat more than four ounces of croaker, orangemouth corvina, sargo, and tilapia taken from the Salton Sea in any two-week period. Women who are pregnant or may become pregnant, nursing mothers, and children age 15 and under should not eat fish from this area. (An additional warning for the New River has been published and posted by the Imperial County Health Department for people to avoid physical contact with the waters of the New River and to avoid eating any fish of any variety taken from the river.)

# Help Fish and Game Wardens put an end to poaching

If you see someone poaching or polluting, immediately call CalTIP at our toll-free number, 24 hours a day, seven days a week. You don't have to give us your name. Help Fish and Game stop the senseless waste of our fish & wildlife resource.





1-888-DFG-ColTIP

Californians Turn In Poachers